

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 December 2004 (02.12.2004)

PCT

(10) International Publication Number
WO 2004/103499 A1

(51) International Patent Classification⁷: A63F 9/24
(21) International Application Number:
PCT/IB2004/001633

(22) International Filing Date: 19 May 2004 (19.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0311669.6 21 May 2003 (21.05.2003) GB

(71) Applicant (for all designated States except US): WATER-
LEAF LIMITED [GB/GB]; 1st Floor, 28 Victoria Street,
Douglas, IM1 2LE Isle of Man (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MOSHAL, Martin
[ZA/GB]; 69 Athol Street, Douglas, IM1 1JE Isle of Man
(GB).

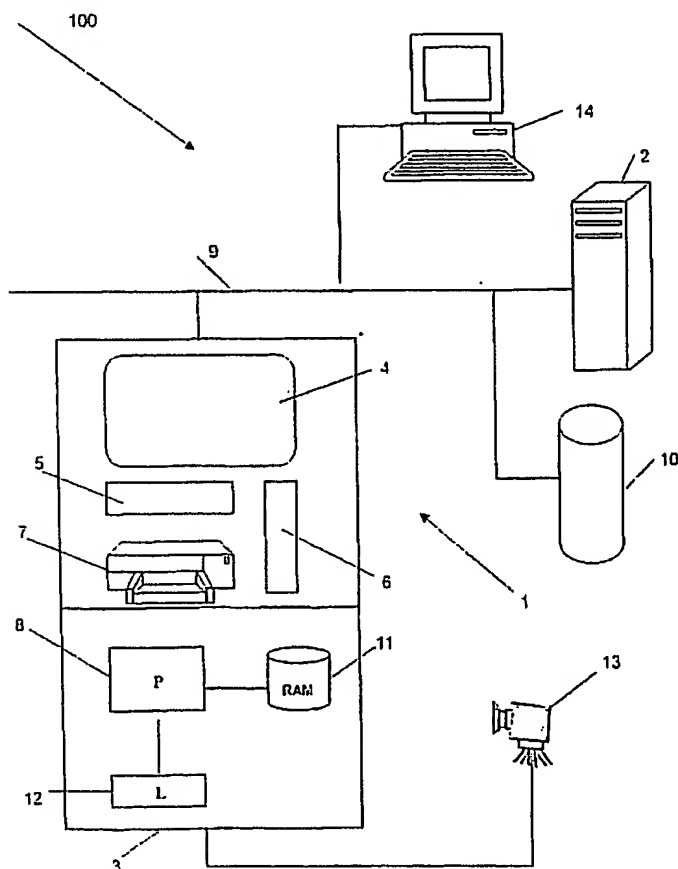
(74) Agent: BOWMAN GILFILLAN (JOHN & KER-
NICK); P O Box 3511, Halfway House, 1685 Midrand
(ZA).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: PLAYER IDENTIFICATION



(57) Abstract: Player identification system (100) includes a betting terminal (1) at which a player plays a wagering game. During the play of the game, the system takes a photograph of the players face with camera (13). The photograph is used for player identification purposes and is logged into database (10).



FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments*

Published:

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

5

PLAYER IDENTIFICATION**Field of the Invention**

10 This invention relates to a player identification system and, more particularly, to a player identification system that can be employed in conjunction with betting terminals. The invention extends to a method of identifying players at betting terminals.

15

Background to the Invention

Betting terminals have become increasingly common in a number of different jurisdictions that have a regulated gambling industry.

20

Such a betting terminal has a player console that offers a player a menu of one or more games of chance that the player can select to play. Each game of chance has outcomes that are determined by random events, usually generated by means of a random number generator implemented in software. The software
25 random number generator may be executed locally within the player console itself, or may be implemented externally in a gaming server, which is linked to the betting terminal by means of a communication network. In the latter topology, one or more separate player consoles may be connected to a single external gaming server by means of the communication network.

30

It is usual for the player to play any of the games of chance by means of pre-purchased credit. For reasons of simplicity and convenience it is customary for

the player console to be equipped with a coin-receiving mechanism and a banknote reader that will allow the player to acquire credit in a simple manner without the necessity of using payment tokens such as credit cards, debit cards and the like. The player console may also be equipped with a printer that prints
5 out an encoded voucher on demand when the player desires to terminate his playing session and to cash out any credit that he may have accumulated. The voucher may be redeemed for value from an operator of the betting terminal.

The games of chance offered by the player console may offer jackpot prizes that
10 can be won from time to time.

Such a player console operates in an "always on" mode, in the sense that no player login or authentication is required in order to play any of the games of chance. The player console may be located at a convenient location, such as a
15 betting shop, an entertainment venue, or the like. The gaming server to which the player console is linked may also be located with the player console, or may be located remotely therefrom.

It is possible that disputes may arise from time to time between different players over the right to cash out from any particular betting terminal, especially when a
20 jackpot prize has been won.

Object of the Invention

25 It is an object of this invention to provide a player identification system, and a method of identifying players at betting terminals that will, at least partially, alleviate the abovementioned difficulties and disadvantages.

Summary of the Invention

In accordance with this invention there is provided a player identification system, comprising:

- 5 a betting terminal operable by a player to play at least one game thereon and to place a wager on an outcome of any turn of the game, the outcome of each turn the game being determined, at least in part, by chance; and
a camera associated with the betting terminal, the camera being arranged to capture an image of the player operating the betting terminal at least once during
10 each turn of the at least one game.

- Further features of the invention provide for the player identification system to include a logging facility capable of logging, for each turn of the at least one game, logging data representative of a size and type of the wager placed by the
15 player on the turn of the game, the corresponding outcome of that turn of the game, and the image of the player captured by the camera during the turn of the game, for the betting terminal to be operable by the player to play any one of a number of different selectable games, for the camera to be arranged to capture the image of the player operating the betting terminal at least once during each
20 turn of any game being played by the player, and for the logging data to be representative, also, of the particular game being played by the player.

- Still further features of the invention provide for the logging facility to include a non-volatile storage memory for storing the logging data thereon, for the storage
25 memory to be configured as a rolling buffer capable of storing logging data relating to a number of the most recent turns of any games played by the player, for the player identification system to include an enquiry facility operable to display any logging data contained in the storage memory, and for the player identification system to include a display monitor capable of displaying any image
30 of the player contained in the storage memory.

The invention extends to a method for identifying players at a betting terminal, comprising the steps of:

- enabling a player to operate a betting terminal to play at least one game thereon and to place a wager on an outcome of any turn of the game, the outcome of
- 5 each turn the game being determined, at least in part, by chance; and
- capturing, at least once during each turn of the at least one game, a camera image of the player operating the betting terminal.

- There is further provided for the method to include a step of logging, for each turn
- 10 of the at least one game, logging data representative of a size and type of the wager placed by the player on the turn of the game, the corresponding outcome of that turn of the game, and the image of the player captured by the camera during the turn of the game, for enabling the player to operate the betting terminal to play any one of a number of different selectable games, for capturing
- 15 the image of the player operating the betting terminal at least once during each turn of any game being played by the player, and for logging additional data representative of the particular game being played by the player.

- There is still further provided for storing the logging data on a non-volatile storage
- 20 memory, for configuring the storage memory as a rolling buffer capable of storing logging data relating to a number of the most recent turns of any games played by the player, for displaying any logging data contained in the storage memory on an enquiry facility, and for displaying any image of the player, contained in the storage memory, on a display monitor included in the enquiry facility.

25

Brief Description of the Drawings

- A preferred embodiment of the invention is described below, by way of example
- 30 only, and with reference to the accompanying drawings, in which:

Figure 1 is a functional representation of a player identification system according to the invention, shown in conjunction with a betting terminal.

5 Detailed Description of the Invention

Referring to Figure 1, a player identification system is indicated generally by reference numeral (100).

- 10 The player identification system (100) is associated with a betting terminal indicated generally by reference numeral (1) that includes a gaming server (2) and a user access facility (3) in the form of a player console having a touch screen (4), a banknote reader (5), a coin receiving mechanism (6) such as a coin slot, and a thermal printer (7). The player console also includes an Internet-
15 enabled processor (8) which is in communication with the gaming server (2) by means of a communication network (9) that is, in this embodiment, the Internet.

- The player console (3) is located remotely from the gaming server (2) and is usable by a player to play any one of a number of different video games that are
20 available for play. A menu of available games is presented to the player on the touch screen (4) and the player is able to select any one of the games in the menu for play by touching a corresponding icon (not shown) displayed on the screen in a manner that is well known in the art.

- 25 The Internet-enabled processor (8) is a conventional personal computer operating under a Windows 2000 operating system, which is well known and commercially available from the Microsoft Corporation of Seattle, Washington, USA. The Internet-enabled processor (8) and the gaming server (2) execute different components of any available game that is selected for play by the
30 player. Each game consists of a client process that is executed in the processor (8) and a server process that is executed in the gaming server (2). The client process of a selected game simulates the progress of the game on the touch

screen (4), while the server process generates, upon request of the of the client process, one or more random events that determine an outcome or outcomes of a turn of the game. The client process obtains the result of the random event from the gaming server (2) along the communication network (9) and utilises the
5 result to display a corresponding outcome of the game to the player in an intelligible manner by means of the simulation on the touch screen (4).

Each one of the available games is playable by the player against the consumption of credit. The player may insert one or more banknotes into the
10 banknote reader (5) and coins into the coin slot (6) in order to procure credit to play any of the games, without the need to use payment tokens such as debit cards, credit cards or the like. The player's credit balance is displayed on the touch screen (4) at all times. The player utilises his credit to place a wager on every turn of the games that he selects for play. The outcome of any wager is
15 either an unsuccessful outcome in which the player's wager is forfeited to an operator of the betting terminal (1), or a successful outcome in which the player's wager is paid out at predetermined odds.

The player identification system (100) includes a logging database (10) remote
20 from the player console (3), which is accessible by means of the communication network (9). The operation of the logging database (10) will be described in more detail in the description that follows. The player identification system (100) includes, further, a logging facility in the form of a non-volatile storage memory (11) and a logging application software program (12) that is executable in the
25 processor (8) of the player console (3). The non-volatile storage memory (11) is a local Random Access Memory circular buffer and is sized to store transaction data corresponding to a predetermined number, say 20, of consecutive wagers made by the player. The transaction data is buffered in the circular buffer (11) by the logging application software program (12) that executes in the processor (8)
30 of the player console (3).

The player identification system (100) also includes a camera (13) arranged to capture an image of a player using the player console (3) to play any available game thereon. The client process that executes in the processor (8) activates the camera (13) to capture the image of the player operating the player console (3) at
5 least once during each turn of any game played by the player at the console.

The transaction data corresponding to any particular wager includes data relating to the size and type of the wager, the outcome of the wager, the size of a prize won by the player for a successful wager, an identification code corresponding to
10 the selected game on which the wager was placed, a further identification code corresponding to a player console from which the wager was made by the player, and the image taken by the camera (13) of the player who made the wager. The logging application software program (12) downloads the buffered transaction data to the logging database (10) when the local buffer (11) is full and, once the
15 download is complete, flushes the local buffer.

The player identification system (100) includes an enquiry facility (14) connected to the communication network (9). The enquiry facility (14) is a conventional computer workstation capable of accessing the transaction data contained in the
20 logging database (10). In particular, the enquiry facility (14) enables the stored image of the player corresponding to any particular wager to be displayed on a display monitor of the computer workstation for viewing by interested parties.

Numerous modifications are possible to this embodiment without departing from
25 the scope of the invention. In particular, the betting terminal (1) may include more than one player console (3) communicable with the gaming server (2). Each player console (3) has a corresponding camera (13), local buffer (11) and logging application software program (12). In this instance, the downloaded contents from the different local buffers (11) of the display consoles (3) are consolidated
30 and merged into the remote logging database (10). The merged transaction data in the remote logging database (10) is available for the performance of offline queries.

Further, the gaming server (2) and the camera (13) may be integrated within the display console (3) to provide, effectively, a standalone betting terminal. In this instance, the functionality of the gaming server (2) and the processor (8) in the display console (3) may be consolidated, necessitating only a single processor for the betting terminal (1). Further, the remote logging database (10) may also be integrated within the display console (3), making it possible to dispense with the use of an open communication network (9) such as the Internet and rely, instead, on a closed communication network or a local communication bus.

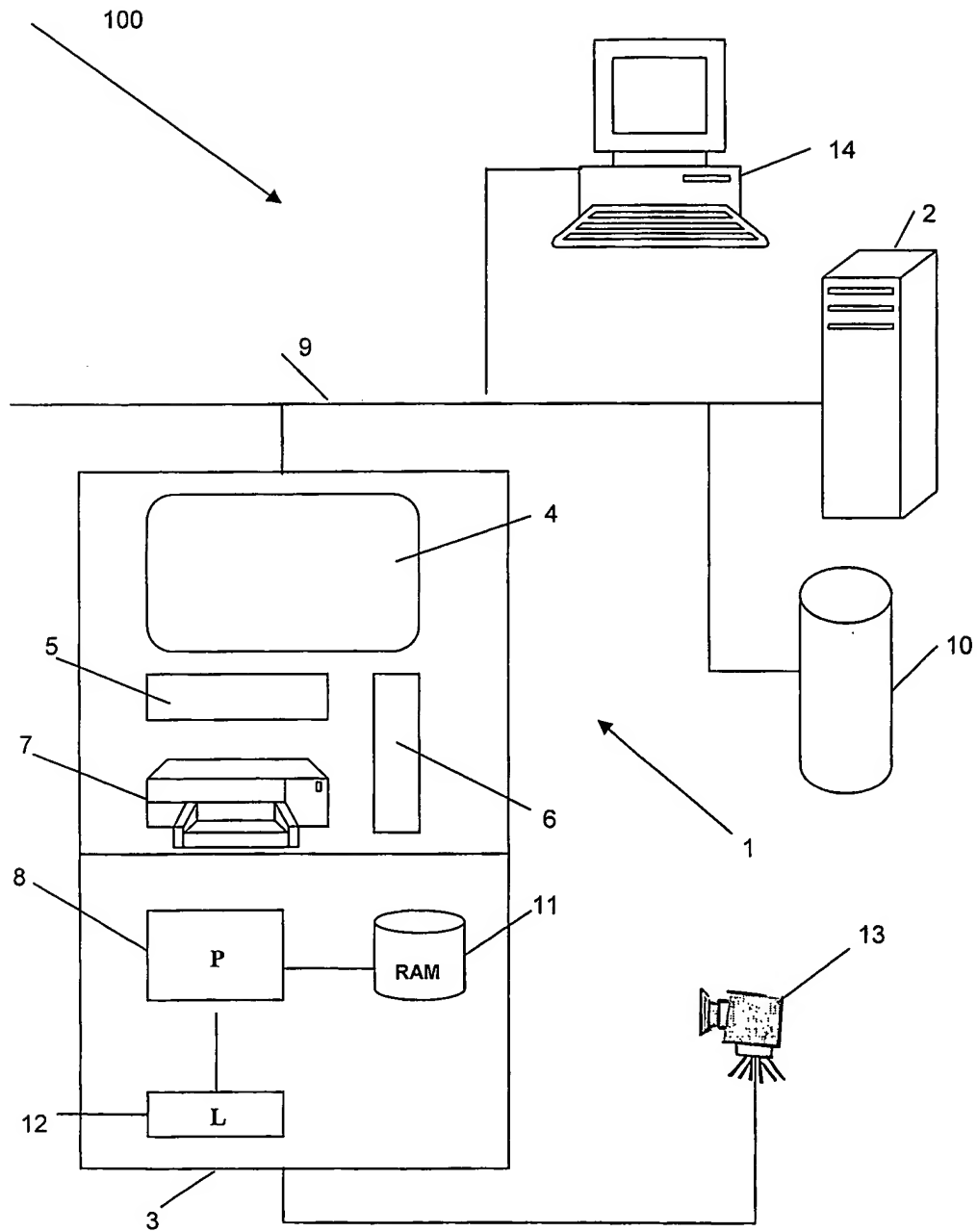
The invention therefore provides a player identification system that enables the identification of users of a betting terminal to be checked and verified.

Claims

1. A player identification system, comprising:
5 a betting terminal operable by a player to play at least one game thereon and to place a wager on an outcome of any turn of the game, the outcome of each turn the game being determined, at least in part, by chance; and a camera associated with the betting terminal, the camera being arranged to capture an image of the player operating the betting terminal at least
10 once during each turn of the at least one game.
2. A player identification system as claimed in claim 1 that includes a logging facility capable of logging, for each turn of the at least one game, logging data representative of a size and type of the wager placed by the player
15 on the turn of the game, the corresponding outcome of that turn of the game, and the image of the player captured by the camera during the turn of the game.
3. A player identification system as claimed in any one of the preceding
20 claims in which the betting terminal is operable by the player to play any one of a number of different selectable games.
4. A player identification system as claimed in claim 3 in which the camera is arranged to capture the image of the player operating the betting terminal
25 at least once during each turn of any game being played by the player.
5. A player identification system as claimed in claim 4 in which the logging data is representative, also, of the particular game being played by the player.

6. A player identification system as claimed any one of claims 2 to 5 in which the logging facility includes a non-volatile storage memory for storing the logging data thereon.
- 5 7. A player identification system as claimed in claim 6 in which the storage memory is configured as a rolling buffer capable of storing logging data relating to a number of the most recent turns of any games played by the player.
- 10 8. A player identification system as claimed in claim 2 that includes an enquiry facility operable to display any logging data contained in the storage memory.
- 15 9. A player identification system as claimed in claim 8 that includes a display monitor capable of displaying any image of the player contained in the storage memory.
- 20 10. A method for identifying players at a betting terminal, comprising the steps of:
enabling a player to operate a betting terminal to play at least one game thereon and to place a wager on an outcome of any turn of the game, the outcome of each turn the game being determined, at least in part, by chance; and
capturing, at least once during each turn of the at least one game, a
25 camera image of the player operating the betting terminal.
- 30 11. A method as claimed in claim 10 that includes a step of logging, for each turn of the at least one game, logging data representative of a size and type of the wager placed by the player on the turn of the game, the corresponding outcome of that turn of the game, and the image of the player captured by the camera during the turn of the game.

12. A method as claimed in either one of claims 10 or 11 that includes the step of enabling the player to operate the betting terminal to play any one of a number of different selectable games.
- 5 13. A method as claimed in claim 12 that includes a step of capturing the image of the player operating the betting terminal at least once during each turn of any game being played by the player.
- 10 14. A method as claimed in claim 13 that includes a step of logging additional data representative of the particular game being played by the player.
- 15 15. A method as claimed in claim 17 that includes a step of storing the logging data on a non-volatile storage memory.
16. A method as claimed in claim 18 that includes a step of configuring the storage memory as a rolling buffer capable of storing logging data relating to a number of the most recent turns of any games played by the player.
- 20 17. A method as claimed in claim 11 that includes a step of displaying any logging data contained in the storage memory on an enquiry facility.
18. A method as claimed in claim 17 in which any image of the player, contained in the storage memory, is displayed on a display monitor included in the enquiry facility.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB04/01633

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A63F 9/24

US CL : 463/29

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 463/29

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,142,876A (CUMBERS) 07 November 2000 (07.11.2000), See Figs 1-3	1-5, 8-18



Further documents are listed in the continuation of Box C.



See patent family annex.

Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

24 August 2004 (24.08.2004)

Date of mailing of the international search report

02 NOV 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Derris Banks

Telephone No. (703) 308-1148

Sheikh H. Vengay
Patent Legal Specialist
Tech. Center 3700

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB04/01633

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☒ Claims Nos.: 6,7
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.